

# RF Exposure Report

Report No.: AGC01741220401FH03

**APPLICATION PURPOSE**: Original Equipment

**PRODUCT DESIGNATION**: Portable Power Station

**BRAND NAME** : BLUETTI

**MODEL NAME** : EB3A

**APPLICANT**: SHENZHEN POWEROAK NEWENER CO., LTD

**DATE OF ISSUE** : Apr. 28, 2022

**STANDARD(S)** : KDB680106 D01 RF Exposure Wireless Charging Base

App v03r01

**REPORT VERSION**: V1.0

Attestation of Global Compliance (Shenzhen) Co., Ltd

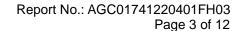




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#### REPORT REVISE RECORD

Report Version	Revise Time	Issued Date	Valid Version	Notes
V1.0	/	Apr. 28, 2022	Valid	Initial Release





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# 1. VERIFICATION OF CONFORMITY

Applicant	SHENZHEN POWEROAK NEWENER CO., LTD
Address	19th floor, Tower 1, Kaidaer Building, Tongsha Road No.168, XiLi Town, Nanshan District, Shenzhen, China
Manufacturer	SHENZHEN POWEROAK NEWENER CO., LTD
Address	19th floor, Tower 1, Kaidaer Building, Tongsha Road No.168, XiLi Town, Nanshan District, Shenzhen, China
Factory	Huizhou PowerOak Innovation Co., Ltd
Address	(No.1 Workshop) Longsheng 5th Road, Laoshe Village, Dayawan West Zone 516083 Huizhou City, Guangdong Province, P.R. China
Product Designation	Portable Power Station
Brand Name	BLUETTI
Test Model	EB3A
Date of test	Apr. 11, 2022 to Apr. 28, 2022
Deviation	No any deviation from the test method
Condition of Test Sample	Normal
Report Template	AGCRT-US-BR/RF

#### We hereby certify that:

The above equipment was tested by Attestation of Global Compliance (Shenzhen) Co., Ltd. The test data, data evaluation, test procedures, and equipment configurations shown in this report were made in accordance with the procedures given in KDB680106 D01.

The results of testing in this report apply to the product/system which was tested only.

Prepared By	Alan Duan	
	Alan Duan (Project Engineer)	Apr. 28, 2022
Reviewed By	Calin Lin	
	Calvin Liu (Reviewer)	Apr. 28, 2022
Approved By	Max Zhang	
	Max Zhang (Authorized Officer)	Apr. 28, 2022



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## 2. GENERAL INFORMATION

# 2.1. PRODUCT DESCRIPTION

A major technical description of EUT is described as following

Operation Frequency	115-205kHz			
Test Frequency	116.9KHz			
Maximum field strength	77.57dBuV/m(PK)@3m			
Number of channels	1			
Antenna Designation	Coil Antenna (Met 15.203 Antenna requirement)			
Hardware Version	EB3A BMS 7S V2.0			
Software Version	V2.0			
Power Supply	Input: AC: 120VAC, 50/60Hz, 9A MAX DC: 12-28VDC, 8.5A, 200W MAX Output: AC × 2: 120VAC, 50/60Hz, 600W Total USB-A × 2: 5VDC, 3A Total USB-C × 1: 5/9/12/15/20VDC, 3A; 20VDC, 5A (E-Marker chip built-in) DC 5521 × 2: 12VDC, 10A Total Cigarette Lighter × 1: 12VDC, 10A (DC 5521 and Cigarette Lighter 10A Total) AC and DC output: 600W Total			
Wireless charger	Wireless Charge1: 5W/7.5W/10W/15W			



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# 3. DESCRIPTION OF TEST MODES

MODE	TEST MODE DESCRIPTION
1	FULL LOAD MAXIMUM POWER
Note: Wireles	s output: 5W, 7.5W, 10W, 15W (maximum wireless output 15W during charging)

# 4. SYSTEM TEST CONFIGURATION

Item	Equipment	Model No.	ID or Specification	Remark
1	Portable Power Station	EB3A	2AYT3-EB3A	EUT



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#### 5. TEST FACILITY

TestSite	Attestation of Global Compliance(Shenzhen) Co., Ltd
Location	1-2/F,Building19,JunfengIndustrialPark,ChongqingRoad,HepingCommunity,FuhaiSt reet,Bao'anDistrict,Shenzhen,Guangdong,China
Designation Number	CN1259
FCC Test Firm Registration Number	975832
A2LA Cert. No.	5054.02
Description	Attestation of Global Compliance(Shenzhen) Co., Ltd is accredited by A2LA

#### **TEST EQUIPMENT LIST**

Description	Manufacturer	Model	S/N	Cal. Date	Cal. Due	
Broadband Field	Narda Safety Test	ELT-400	J-0004	Jun. 09, 2021	Jun. 08, 2022	
Meter	Solutions GmbH	EL1-400	J-000 <del>4</del>	Juli. 09, 2021	Juli. 00, 2022	
Drobo EUD	Narda Safety Test	2300/90.10	J-0015	Jun. 09, 2021	Jun. 08, 2022	
Probe FHP	Solutions GmbH	2300/90.10	J-0015	Juli. 09, 2021	Juli. 00, 2022	



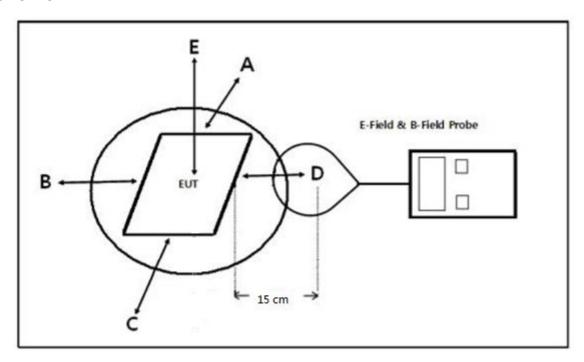


# 6. RADIO FREQUEN CY(RF) EXPOSURETEST

#### 6.1. LIMITS

For devices designed for typical desktop applications, such a wireless charging pads, RF exposure evaluation should be conducted assuming a user separation distance of 15 cm. E and H field strength measurements or numerical modeling may be used to demonstrate compliance. Measurements should be made from all sides and the top of the primary/client pair, with the 15 cm measured from the center of the probe(s) to the edge of the device. Emissions between 100 kHz to 300 kHz should be assessed versus the limits at 300 kHz in Table 1 of Section 1.1310: 614 V/m and 1.63 A/m.

#### **6.2. TEST SETUP**



Note: Position A: Front of EUT; Position B: Left of EUT; Position C: back of EUT; Position D: Right of EUT; Position E: Top of EUT(20 cm measure distance);



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## **6.3. TEST PROCEDURE**

The EUT was placed on a non-conductive table top and the ancillary equipment (e.g.mobile phone) was placed on the EUT for charging.

Maximum E-field and H-field measurements were tested 15cm from each side of the EUT. For top side the measure distance is 20cm.

Along the side of the EUT to center of E-field probe and H-field probe were positioned at the location to search maximum field strength.



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# 6.4. TEST RESULT

Test condition: Mode 1

## E-field strength test result:

Frequency	Probe	Probe	Probe	Probe	Probe	Limit
Range	Position A	Position B	Position C	Position D	Position E	(V/m)
	(V/m)	(V/m)	(V/m)	(V/m)	(V/m)	
116.9kHz	1.18	1.14	1.12	1.17	1.63	614

# H-field strength test result:

Frequency	Probe	Probe	Probe	Probe	Probe	Limit
Range	Position A	Position B	Position C	Position D	Position E	(A/m)
	(A/m)	(A/m)	(A/m)	(A/m)	(A/m)	
116.9kHz	0.36	0.28	0.35	0.37	0.56	1.63

Test condition: Mode 2 E-field strength test result:

Frequency	Probe	Probe	Probe	Probe	Probe	Limit
Range	Position A	Position B	Position C	Position D	Position E	(V/m)
	(V/m)	(V/m)	(V/m)	(V/m)	(V/m)	
114.3kHz	0.99	0.95	0.87	0.94	1.05	614

#### H-field strength test result:

Frequency	Probe	Probe	Probe	Probe	Probe	Limit
Range	Position A	Position B	Position C	Position D	Position E	(A/m)
	(A/m)	(A/m)	(A/m)	(A/m)	(A/m)	
114.3kHz	0.33	0.32	0.34	0.31	0.53	1.63



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Test condition: Mode 3 E-field strength test result:

Frequency	Probe	Probe	Probe	Probe	Probe	Limit
Range	Position A	Position B	Position C	Position D	Position E	(V/m)
	(V/m)	(V/m)	(V/m)	(V/m)	(V/m)	
108.4kHz	0.66	0.63	0.65	0.62	0.84	614

## H-field strength test result:

Frequency	Probe	Probe	Probe	Probe	Probe	Limit
Range	Position A	Position B	Position C	Position D	Position E	(A/m)
	(A/m)	(A/m)	(A/m)	(A/m)	(A/m)	
108.4kHz	0.14	0.18	0.16	0.14	0.25	1.63

Conclusion: The test value is less than 50% MPE limit, which meets the requirements



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# **APPENDIX A: PHOTOGRAPHS OF TEST SETUP**

Refer to the Report No.: AGC01741220401AP01

----END OF REPORT----



# Conditions of Issuance of Test Reports

- 1. All samples and goods are accepted by the Attestation of Global Compliance (Shenzhen) Co., Ltd (the "Company") solely for testing and reporting in accordance with the following terms and conditions. The company provides its services on the basis that such terms and conditions constitute express agreement between the company and any person, firm or company requesting its services (the "Clients").
- 2. Any report issued by Company as a result of this application for testing services (the "Report") shall be issued in confidence to the Clients and the Report will be strictly treated as such by the Company. It may not be reproduced either in its entirety or in part and it may not be used for advertising or other unauthorized purposes without the written consent of the Company. The Clients to whom the Report is issued may, however, show or send it, or a certified copy thereof prepared by the Company to its customer, supplier or other persons directly concerned. The Company will not, without the consent of the Clients, enter into any discussion or correspondence with any third party concerning the contents of the Report, unless required by the relevant governmental authorities, laws or court orders.
- 3. The Company shall not be called or be liable to be called to give evidence or testimony on the Report in a court of law without its prior written consent, unless required by the relevant governmental authorities, laws or court orders.
- 4. In the event of the improper use of the report as determined by the Company, the Company reserves the right to withdraw it, and to adopt any other additional remedies which may be appropriate.
- 5. Samples submitted for testing are accepted on the understanding that the Report issued cannot form the basis of, or be the instrument for, any legal action against the Company.
- 6. The Company will not be liable for or accept responsibility for any loss or damage however arising from the use of information contained in any of its Reports or in any communication whatsoever about its said tests or investigations.
- 7.Clients wishing to use the Report in court proceedings or arbitration shall inform the Company to that effect prior to submitting the sample for testing.
- 8. The Company is not responsible for recalling the electronic version of the original report when any revision is made to them. The Client assumes the responsibility to providing the revised version to any interested party who uses them.
- 9. Subject to the variable length of retention time for test data and report stored hereinto as otherwise specifically required by individual accreditation authorities, the Company will only keep the supporting test data and information of the test report for a period of six years. The data and information will be disposed of after the aforementioned retention period has elapsed. Under no circumstances shall we provide any data and information which has been disposed of after retention period. Under no circumstances shall we be liable for damage of any kind, including (but not limited to) compensatory damages, lost profits, lost data, or any form of special, incidental, indirect, consequential or punitive damages of any kind, whether based on breach of contract of warranty, tort (including negligence), product liability or otherwise, even if we are informed in advance of the possibility of such damages.